REMARKS

Claims 1-28 are pending in this application, of which claims 11-20 are withdrawn as being directed to a non-elected invention. By this Amendment, claims 1 and 26 are amended. No new matter is added. Claims 1 and 26 are the independent claims.

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Applicants note with appreciation the Examiner's acknowledgement that certified copies of all priority documents have been received by the U.S.P.T.O.

Applicants also respectfully note the present action indicates that the drawings have been accepted by the Examiner.

Applicants Initiated Interview Summary

The courtesies extended to Applicants' representative, ***David J. Cho, Reg. No. 48,078***, during a telephonic interview with Examiner Dieterle and SPE Barton conducted on May 12, 2011, are acknowledged and appreciated. The substance of the interview is set forth in the Examiner's Interview Summary and in the following Applicant Initiated Interview. As required by 37 C.F.R. § 1.133(b), Applicants' summary of that interview is as follows:

1. Brief Description of any Exhibit Shown

No exhibit was shown or demonstrated during the interview of May 12, 2011.

2. Identification of the Claims Discussed

The Examiner and Applicants' representative discussed independent claim 1.

3. Identification of the Specific Prior Art Discussed

The Examiner and Applicants' representative discussed the Gunasingham article.

4. Identification of the Proposed Amendments

As presented above in the instant amendment, the Examiner agreed that removal of the feature "for selecting pulse lengths" in the preamble of claim 1, would obviate the §112, first paragraph.

5. Summary of the Arguments Presented to the Examiner

Applicants' representative further presented arguments regarding the above proposed amendments in the context of the §112, first paragraph rejection and of the Gunasingham article. More specifically, Applicants' representative argued that Gunasingham fails to disclose or suggest, *inter alia*, "selecting relaxation-phase pulse lengths so that, at the end of the pulse, a concentration gradient is relaxed such that at a beginning of a following measuring phase, the change in concentration of the mediator, brought about by the measurement of the mediator, is reversible," as recited in claim 1. The Examiner somewhat agreed, but indicated that a Request for Continued Examination should be filed so as to formally consider Applicants' amendments and/or remarks.

6. General Outcome of the Interview

An agreement between the Examiner and Applicants' representative was generally reached. In particular, it was agreed that upon removal of the feature "for

selecting pulse lengths" in the preamble in the claims would overcome the §112 first paragraph rejection.

In regard to the prior art rejection, the Examiner understood Applicants' remarks and suggested to file a RCE so as to formally consider and examine the Gunasingham article.

Claim Rejections - 35 U.S.C. § 112

I. First Paragraph

Claims 1-10, 21-25, and 28 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Applicants respectfully traverse this rejection for the reasons discussed below.

As discussed and agreed by the Examiner during the interview, Applicants have amended independent claim 1 to obviate the rejections under § 112, first paragraph. Specifically, Applicants have removed the feature "for selecting pulse lengths" in the preamble of claim 1. Hence, claim 1 is directed to a method for measuring at least one of a concentration and change in concentration of redox-active substance by including *at least* measuring an oxidation current to obtain a measuring phase, measuring a reduction current to obtain a relaxation phase, and selecting the respective measured measuring-phase-pulse or relaxation-phase pulse lengths.

Therefore, Applicants respectfully request that this rejection of claim 1, and of claims 2-10, 21-25, and 28 depending therefrom, be reconsidered and withdrawn.

II. Second Paragraph

Claims 1, 2-10, 21-25, and 28 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse this rejection for the reasons discussed below.

As discussed and agreed by the Examiner during the interview, Applicants have amended the claims, to obviate the rejections. In particular, claim 1 has been amended to include "the measurements of the oxidation currents and the reduction currents."

Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, are respectfully requested.

Claim Rejections - 35 U.S.C. § 102

Claims 1-4 and 28 are rejected under 35 U.S.C. § 102(b) as being anticipated by J. Electroanal. Chem. 287, 1990, 349-362 to Gunasingham et al. (hereinafter "*Gunasingham*"). Applicants respectfully traverse this rejection for the reasons discussed below.

Applicants respectfully submit that the Gunasingham reference fails to disclose or suggest, *inter alia*:

> selecting relaxation-phase pulse lengths so that, at the end of the pulse, a concentration gradient is relaxed such that at a beginning of a following measuring phase, the change in concentration of the mediator, brought about by the measurement of the mediator, ***is reversible***,

as recited in amended claim 1.

In other words, claim 1 recites that (in connection with measuring-phase and relaxation-phase) there has to be an oxidation potential pulse followed by a pulse at a reducing potential or vice versa in the measuring-phase and relaxation-phase.

In the outstanding Final Office Action, the rejection is based on a contention that the "TTF must be measured since the entire system of Gunasingham is subjected to pulsed detection (ie., a measuring and relaxation phase, see figure 1)."[1] Although Gunasingham may discloses a "pulsed" detection, it is submitted that Gunasingham is silent in teaching or suggesting "at a beginning of a following measuring phase, the change in concentration of the mediator, brought about by the measurement of the mediator, ***is reversible***," as taught by claim 1.

Further, because the substance in Gunasingham to be measured is "glucose," there is nothing regarding the relation of the base potential (of Fig. 1) to the oxidation or reduction potential of measured substance glucose. Gunasingham merely discloses the different oxidation and reduction potentials of TTF (base potential in Fig. 1 is reduction potential of TTF) and glucose (pulse potential in Fig. 1 is oxidation potential of glucose at enzyme glucose oxidase electrode). This is not the same as disclosing an oxidation potential pulse followed by a pulse at a reducing potential or vice versa.

Moreover, Applicants respectfully submit that Gunasingham also fails to teach or suggest "selecting measuring-phase pulse lengths so that, at the end of the pulse, a capacitive current is small in ***comparison with a Faraday current***," as recited in claim 1. Specifically, Applicants submit that Gunasingham is completely silent of teaching or suggesting of comparing the capacitive current to *a Faraday current.*

[1] See Final Office Action mailed February 16, 2011, page 6, paragraph 10.

Therefore, contrary to the Examiner's contention, the Gunasingham reference does not disclose or suggest each and every element of claim 1.

Since the Gunasingham reference fails to disclose each and every element of claim 1, it cannot provide a basis for a rejection under 35 U.S.C. § 102(b) and, thus, is allowable. Claims 2-4 and 28 depend from amended claim 1 and, therefore, allowable for similar reasons to those discussed above with respect to claim 1.

For at least these reasons, the Examiner is respectfully requested to reconsider and withdraw the § 102(b) rejection of claims 1-4 and 28.

Claims 26 and 27 are rejected under 35 U.S.C. § 102(b) as being anticipated by Anal. Chem. 1989, 61 2566-2570 to Bindra et al. ("the Bindra reference"); and Claims 26 and 27 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,391,558 to Henkens et al. ("the Henkens reference"). Applicants respectfully traverse these rejections for the reasons discussed below.

For the similar reasons as discussed above regarding claim 1, Applicants respectfully submit that claim 26 is similarly allowable. In particular, claim 26 recites, *inter alia*:

> **a device for selecting, in this connection, the measuring-phase pulse lengths so that, at the end of the pulse, a capacitive current is small in comparison with a Faraday current;**
>
> **a device for selecting the relaxation-phase pulse lengths so that, at the end of the pulse, the concentration gradient is relaxed so that at the beginning of a following measuring phase, the change in concentration of the mediator, brought about by the consumption of the mediator by the measurement itself, is reversible.**

Applicants respectfully submit that the Bindra and the Henkens references similarly fail to provide the teachings, discussed above, that are missing from the Gunasingham reference.

In view of the above, Applicants respectfully submit that the Bindra and the Henkens references fail to teach or suggest *all* of the elements of claim 26. Thus, no *prima facie* case of anticipation has been established. Accordingly, claim 26 is allowable over the Bindra and the Henkens references. Dependent claim 27 depends from claim 26 and is allowable for at least the reasons that claim 26 is allowable. Therefore, Applicants respectfully request that the rejection of claims 26 and 27 under 35 U.S.C. § 103(a) be favorable reconsidered and withdrawn.

Claim Rejections - 35 U.S.C. § 103

Claims 5, 10, and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Gunasingham et al. in view of Bindra et al. Applicants respectfully traverse this rejection for the reasons discussed below.

Claims 5, 10, and 21 are believed to be allowable for at least the reasons set forth above regarding claim 1. The Bindra reference fails to provide the teachings noted above as missing from the Gunasingham reference. Since claims 5, 10, and 21 are patentable at least by virtue of their dependency on claim 1, Applicants respectfully request that the rejection of claims 5, 10, and 21 under 35 U.S.C. § 103(a) be withdrawn.

Claims 6-8 and 22-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Gunasingham et al. in view of WO 01/21827 to Buck et al. ("the

Buck reference"). Applicants respectfully traverse this rejection for the reasons discussed below.

Claims 6-8 and 22-24 are believed to be allowable for at least the reasons set forth above regarding claim 1. The Buck reference fails to provide the teachings noted above as missing from the Gunasingham reference. Since claims 6-8 and 22-24 are patentable at least by virtue of their dependency on claim 1, Applicants respectfully request that the rejection of claims 6-8 and 22-24 under 35 U.S.C. § 103(a) be withdrawn.

Claims 9 and 25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Gunasingham et al. and Buck et al. in view of Bindra et al. Applicants respectfully traverse this rejection for the reasons discussed below.

Claims 9 and 25 are believed to be allowable for at least the reasons set forth above regarding claim 1. The Bindra reference fails to provide the teachings noted above as missing from the Gunasingham and Buck references. Since claims 9 and 25 are patentable at least by virtue of their dependency on claim 1, Applicants respectfully request that the rejection of claims 9 and 25 under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

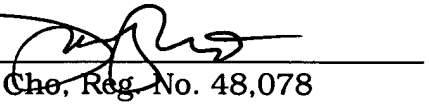
Pursuant to 37 C.F.R. §1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required $130.00 extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By 

David J. Cho, Reg. No. 48,078

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

DJD/DJC:has
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